Robert H Miller

List of Publications by Year
in descending order

64 papers	5,747 citations	159358 30 h-index	143772 57 g-index
65 all docs	65 docs citations	65 times ranked	7453 citing authors

#	Article	IF	Citations
1	LINGO-1 negatively regulates myelination by oligodendrocytes. Nature Neuroscience, 2005, 8, 745-751.	7.1	553
2	Human bone marrowâ€derived mesenchymal stem cells induce Th2â€polarized immune response and promote endogenous repair in animal models of multiple sclerosis. Glia, 2009, 57, 1192-1203.	2.5	478
3	Regulation of oligodendrocyte development in the vertebrate CNS. Progress in Neurobiology, 2002, 67, 451-467.	2.8	377
4	Changing role of forebrain astrocytes during development, regenerative failure, and induced regeneration upon transplantation. Journal of Comparative Neurology, 1986, 251, 23-43.	0.9	369
5	Hepatocyte growth factor mediates mesenchymal stem cellâ€“induced recovery in multiple sclerosis models. Nature Neuroscience, 2012, 15, 862-870.	7.1	365
6	Drug-based modulation of endogenous stem cells promotes functional remyelination in vivo. Nature, 2015, 522, 216-220.	13.7	336
7	Promotion of central nervous system remyelination by induced differentiation of oligodendrocyte precursor cells. Annals of Neurology, 2009, 65, 304-315.	2.8	270
8	CNS Myelin Wrapping Is Driven by Actin Disassembly. Developmental Cell, 2015, 34, 152-167.	3.1	262
9	Induction of myelinating oligodendrocytes in human cortical spheroids. Nature Methods, 2018, 15, 700-706.	9.0	242
10	Oligodendrocyte origins. Trends in Neurosciences, 1996, 19, 92-96.	4.2	219
11	CXCR2-positive neutrophils are essential for cuprizone-induced demyelination: relevance to multiple sclerosis. Nature Neuroscience, 2010, 13, 319-326.	7.1	209
12	Human iPSC Glial Mouse Chimeras Reveal Glial Contributions to Schizophrenia. Cell Stem Cell, 2017, 21, 195-208.e6.	5.2	204
13	Accumulation of 8,9-unsaturated sterols drives oligodendrocyte formation and remyelination. Nature, 2018, 560, 372-376.	13.7	170
14	Cell-based therapeutic strategies for multiple sclerosis. Brain, 2017, 140, 2776-2796.	3.7	139
15	Erythropoietin signaling promotes oligodendrocyte development following prenatal systemic hypoxicâ€“ischemic brain injury. Pediatric Research, 2013, 74, 658-667.	1.1	111
16	Contact with Central Nervous System Myelin Inhibits Oligodendrocyte Progenitor Maturation. Developmental Biology, 1999, 216, 359-368.	0.9	103
17	Netrin 1 mediates spinal cord oligodendrocyte precursor dispersal. Development (Cambridge), 2003, 130, 2095-2105.	1.2	101
18	Pharmaceutical integrated stress response enhancement protects oligodendrocytes and provides a potential multiple sclerosis therapeutic. Nature Communications, 2015, 6, 6532.	5.8	87

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19	Human Mesenchymal Stem Cells Signals Regulate Neural Stem Cell Fate. Neurochemical Research, 2007, 32, 353-362.	1.6	84
20	The roles of blood-derived macrophages and resident microglia in the neuroinflammatory response to implanted Intracortical microelectrodes. Biomaterials, 2014, 35, 8049-8064.	5.7	77
21	Patterning of spinal cord oligodendrocyte development by dorsally derived BMP4. Journal of Neuroscience Research, 2004, 76, 9-19.	1.3	69
22	Apoptosis of oligodendrocytes in the central nervous system results in rapid focal demyelination. Annals of Neurology, 2012, 72, 395-405.	2.8	60
23	Contribution of the oligodendrocyte lineage to CNS repair and neurodegenerative pathologies. Neuropharmacology, 2016, 110, 539-547.	2.0	60
24	Spinal cord oligodendrocytes develop from a limited number of migratory, highly proliferative precursors. , 1997, 50, 157-168.		52
25	Regulation of oligodendrocyte development. Molecular Neurobiology, 1998, 18, 247-259.	1.9	50
26	Targeting CD14 on blood derived cells improves intracortical microelectrode performance. Biomaterials, 2018, 163, 163-173.	5.7	47
27	Density dependent modulation of cell cycle protein expression in astrocytes. Journal of Neuroscience Research, 2001, 66, 487-496.	1.3	42
28	Cyclin-Dependent Kinase 5 Mediates Adult OPC Maturation and Myelin Repair through Modulation of Akt and GsK-3Â Signaling. Journal of Neuroscience, 2014, 34, 10415-10429.	1.7	40
29	Isolation and Culture of Spinal Cord Astrocytes. Methods in Molecular Biology, 2012, 814, 93-104.	0.4	37
30	Astrocytes Are Required for Oligodendrocyte Survival and Maintenance of Myelin Compaction and Integrity. Frontiers in Cellular Neuroscience, 2020, 14, 74.	1.8	37
31	The potential of mesenchymal stem cells for neural repair. Discovery Medicine, 2010, 9, 236-42.	0.5	33
32	Modulation of Adhesion Molecule Expression on Rat Cortical Astrocytes During Maturation. Journal of Neurochemistry, 1993, 60, 1453-1466.	2.1	31
33	Loss of HDAC11 ameliorates clinical symptoms in a multiple sclerosis mouse model. Life Science Alliance, 2018, 1, e201800039.	1.3	31
34	Apoptosis of Oligodendrocytes during Early Development Delays Myelination and Impairs Subsequent Responses to Demyelination. Journal of Neuroscience, 2015, 35, 14031-14041.	1.7	27
35	Emerging Cellular and Molecular Strategies for Enhancing Central Nervous System (CNS) Remyelination. Brain Sciences, 2018, 8, 111.	1.1	27
36	Homotypic cell contact-dependent inhibition of astrocyte proliferation. , 1998, 22, 379-389.		25

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37	Cellular approaches for stimulating CNS remyelination. Regenerative Medicine, 2007, 2, 817-829.	0.8	25
38	B Cells in Neuroinflammation: New Perspectives and Mechanistic Insights. Cells, 2021, 10, 1605.	1.8	25
39	The Activators of Cyclin-Dependent Kinase 5 p35 and p39 Are Essential for Oligodendrocyte Maturation, Process Formation, and Myelination. Journal of Neuroscience, 2016, 36, 3024-3037.	1.7	24
40	Notochord is essential for oligodendrocyte development inXenopus spinal cord. , 1997, 47, 361-371.		23
41	Restoring the balance between disease and repair in multiple sclerosis: insights from mouse models. DMM Disease Models and Mechanisms, 2010, 3, 535-539.	1.2	22
42	MSC Therapeutics in Chronic Inflammation. Current Stem Cell Reports, 2016, 2, 168-173.	0.7	22
43	A novel form of migration of glial precursors. , 1996, 16, 27-39.		18
44	Discovery of 1,2,3-Triazole Derivatives for Multimodality PET/CT/Cryoimaging of Myelination in the Central Nervous System. Journal of Medicinal Chemistry, 2017, 60, 987-999.	2.9	16
45	Calcium control of myelin sheath growth. Nature Neuroscience, 2018, 21, 2-3.	7.1	15
46	In vitro and in vivo characterization of blastemal cells from regenerating newt limbs. The Journal of Experimental Zoology, 1992, 262, 180-192.	1.4	14
47	Community pharmacist outreach program directed at physicians treating congestive heart failure. American Journal of Health-System Pharmacy, 2000, 57, 747-752.	0.5	13
48	CNS disease diminishes the therapeutic functionality of bone marrow mesenchymal stem cells. Experimental Neurology, 2017, 295, 222-232.	2.0	13
49	Oligodendrocyte-specific loss of Cdk5 disrupts the architecture of nodes of Ranvier as well as learning and memory. Experimental Neurology, 2018, 306, 92-104.	2.0	13
50	Design, Synthesis, and Evaluation of Fluorinated Radioligands for Myelin Imaging. Journal of Medicinal Chemistry, 2016, 59, 3705-3718.	2.9	12
51	A cell surface antigen expressed by astrocytes and their precursors. Glia, 1993, 8, 20-32.	2.5	11
52	Demyelination in the central nervous system mediated by an anti-oligodendrocyte antibody. , 1998, 54, 158-168.		10
53	Targeting glioma-initiating cells in GBM: ABTC-0904, a randomized phase 0/II study targeting the Sonic Hedgehog-signaling pathway.. Journal of Clinical Oncology, 2014, 32, 2026-2026.	0.8	8
54	Transcriptional Profiling of Mesenchymal Stem Cells Identifies Distinct Neuroimmune Pathways Altered by CNS Disease. International Journal of Stem Cells, 2018, 11, 48-60.	0.8	8

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55	Repurposing the cardiac glycoside digoxin to stimulate myelin regeneration in <scp>chemicallyâ€induced</scp> and <scp>immuneâ€mediated</scp> mouse models of multiple sclerosis. Glia, 2022, 70, 1950-1970.	2.5	7
56	Building bridges with astrocytes for spinal cord repair. , 2006, 5, 6.		5
57	Antibody-mediated oligodendrocyte cell death requires an astrocyte-derived cosignal. , 1998, 52, 137-148.		4
58	Cell type specific isolation of primary astrocytes and microglia from adult mouse spinal cord. Journal of Neuroscience Methods, 2022, 375, 109599.	1.3	4
59	A change of fate for nerve repair. Nature, 2017, 551, 41-42.	13.7	3
60	Oligodendrocyte ablation as a tool to study demyelinating diseases. Neural Regeneration Research, 2016, 11, 886-9.	1.6	3
61	Developmental ablation of mature oligodendrocytes exacerbates adult CNS demyelination. Brain, Behavior, & Immunity - Health, 2020, 7, 100110.	1.3	2
62	Renegade nuclear enzymes disrupt axonal integrity. Nature Neuroscience, 2010, 13, 143-144.	7.1	1
63	Refinement of axonal conduction and myelination in the mouse optic nerve indicate an extended period of postnatal developmental plasticity. Developmental Neurobiology, 2022, , .	1.5	1
64	Adherent self-renewable human embryonic stem cell-derived neural stem cell line: functional engraftment in experimental stroke model. Regenerative Medicine, 2008, 3, 275-279.	0.8	0